roads, or taken off-site for disposal in a permitted disposal site. A more detailed narrative description of construction is in Appendix A.

### 2.2.3 Areas of Construction Impact

Areas of permanent impact would be those areas where the surface of the ground would be permanently disturbed. Specifically, new access roads and footings or anchors for tower, monopole, or crossing structures are areas that would be permanently impacted. Areas of temporary impact are areas where construction activity may take place but where restoration of the surface is possible. These areas include the work areas used to erect the towers, monopoles, or crossing structures; pull sites; laydown areas for the monopoles; and the trenches for the optical cables under the 500 kV transmission line at the substation. In some places, areas of temporary disturbance would overlap.

For this EA, the calculations of areas of impact or disturbance are based on an evaluation of preliminary plans and the assumptions stated in Appendix A. As plans are refined, the exact areas of impact may change. The assessment in this EA is intended to indicate the scale of possible impacts and serve as a basis for the general calculation of mitigation requirements. It should be noted that many areas of temporary disturbance, such as work areas around towers or poles and pull sites, would certainly overlap at least partially, so the total estimate for temporary impact area is overestimated and therefore conservative (worst-case).

The areas of impact, permanent and temporary, from construction of the proposed project are presented in Table 2.1. A more detailed discussion of how the areas were calculated and the assumptions on which they are based is provided in Appendix A.

### 2.2.4 Operations and Maintenance

Maintenance and operations requirements include, but are not necessarily limited to, the following: (1) yearly maintenance grading of access roads; (2) insulator washing; (3) monthly aerial inspection of lines by helicopter; (4) monthly on-the-ground inspection of towers/poles and access roads by vehicle (pick-up truck); (5) air or ground inspection as needed after severe rain, lightning, wind, or sandstorms; (6) repair of tower or pole components (arms, foundations etc.) as needed; (7) repair or re-conductor of lines as needed; (8) replacement of insulators as needed; (9) painting pole or tower identification markings or corroded areas on towers or poles; and (10) response to emergency situations (outages, etc.) as needed to restore power.

For most of these operations, equipment could use the access roads and no significant additional disturbance would occur. Transmission line conductors may occasionally need to be upgraded or replaced over the life of the line. To accomplish this, the old cables are taken down and new cables are strung on the insulators in an operation similar to the

**TABLE 2.1**
**AREA OF CONSTRUCTION IMPACTS**

| Type of Impact | Area of Impact in Acres | |
|---|---|---|
| | Temporary | Permanent |
| Lattice Tower Footings | | <0.06 |
| Lattice Tower Access Roads | | 1.72 |
| Lattice Suspension Tower Work Areas | 2.46 | |
| Lattice Deflection Tower Work Areas | 0.88 | |
| Lattice Tower Pull Sites | 0.83 | |
| Area of Potential Impact* | 9.5 | |
| Monopole Pull Sites and Work Areas | 0.48 | |
| Monopole Laydown Areas | 1.21 | |
| Optical Line Trenches | 0.06 | |
| Monopole Footings | | <0.04 |
| Monopole Access Roads | | 1.56 |

*Work area near the IV Substation that will be subject to intensive disturbance. It is likely not all of this area will be disturbed.

cable-pulling operation used to initially install the conductors. While the project access roads can be used for access, pull sites would also be required. The size and location of these pull sites may vary, depending on the cable and equipment used, the methods used by the contractor, and the technology available at the time. For these reasons, the size and location of future temporary disturbance due to pull sites cannot be accurately estimated. In any event, such conductor replacement is infrequent and would require an amendment to any Presidential permit issued in the proceeding.

### 2.2.5 Connections to Facilities in Mexico

At the international border, both the BCP and SER transmission lines would connect with double-circuit, 230 kV transmission lines that are presently being constructed in Mexico. The BCP transmission line would connect to a transmission line being constructed by EBC in Mexico, which in turn would connect to the La Rosita Power Complex (LRPC). The EBC turbine (310 MW) and the three EAX turbines (250 MW each) (Figure 1.2) make up the 1,060 MW LRPC. The four combustion turbines would operate in combined-cycle configuration and would run on natural gas. The EBC transmission line would be connected to the EBC turbine and to the EAX turbine designated for export (560 MW total). The other two units owned by EAX will supply power to the Comisión Federal de Electricidad, the Mexican national utility, under a 25-year power purchase contract. BCP has submitted information indicating that EBC and EAX jointly have spent or have committed to spend approximately $600 million out of a total estimated project cost of $765 million for the entire LRPC project.

The EBC and the EAX turbine designated for export would be equipped with air emissions control technology, including dry low-$NO_x$ (oxides of nitrogen) combustor technology and selective catalytic reduction (SCR) system for $NO_x$ emissions control. EBC has received a Mexican environmental permit (Manifesto de Impacto Ambiental SGPA-DGIRA-002526) for the proposed generating facility, as well as for the linear transmission line facilities located in Mexico. The environmental permit for the EAX generation facilities is D.O.O.DGOEIA-006752.

The SER transmission line would connect at the international border to a double-circuit, 230 kV transmission line in Mexico that is being constructed by TDM. The TDM transmission line would connect with the Termoeléctrica de Mexicali Power Project located approximately three miles (five kilometers) south of the international border, just east of CFE's La Rosita Substation in Mexicali. The TDM generating plant is designed to produce 600 MW of power, all of which is to be exported to the United States by way of the TDM and SER transmission lines. Information submitted by SER indicates that TDM has made over $280 million in construction contractual commitments ($180 million actually spent to date) and that they would incur an additional $200 million in penalty costs if the project were to be cancelled. The facility would utilize gas turbine technology in a combined cycle configuration, utilizing natural gas as fuel.